

Outbreak Report, July- September, 2011, State of West Virginia

Outbreaks are immediately reportable in West Virginia. Between July and September 2011, there were 28 outbreaks reported in West Virginia. Of the 28 outbreaks reported during this period, 21 (75%) were confirmed as outbreaks or clusters of disease. Of the 21 confirmed outbreaks, 8 (38%) were reported from healthcare facilities. Outbreaks were reported from 11 counties. Of the 21 confirmed outbreaks, 9 (43%) were enteric disease outbreaks, 4 (19%) were respiratory disease outbreaks, 2 (9%) were rash illness outbreaks, and 6 (29%) outbreaks were categorized as “other”.

This report summarizes the types and reporting sources of the confirmed outbreaks:

Enteric Disease Outbreaks

Nine enteric disease outbreaks were reported from 6 counties; 4 of these outbreaks were investigated as multi-state outbreaks. Of the 9 enteric disease outbreaks, 6 (67%) were confirmed by laboratory testing.

The following table describes enteric disease outbreaks:

Table III: Enteric Disease Outbreaks, West Virginia, July - September, 2011 (N=9)

| Type of Outbreak | Number of Outbreaks | Reporting Source | Laboratory Testing |
|------------------------------|---------------------|-----------------------------|--|
| Acute Gastroenteritis | 1 1 1 | Community School LTCF | Negative or non-contributory lab results, No testing done |
| Salmonella | 2 | Community – Multi-state | Lab confirmed |
| Listeriosis | 1 | Community – Multi-state | Lab confirmed |
| <i>Clostridium difficile</i> | 1 | Hospital | Lab confirmed |
| <i>Escherichia coli</i> | 1 | Community – Multi-state | Lab confirmed |
| Campylobacteriosis | 1 | School camping trip | Lab confirmed |

Respiratory Disease Outbreaks:

Four respiratory disease outbreaks were reported from 3 counties. Of the 4 respiratory disease outbreaks 1 (25%) was confirmed by laboratory testing.

The following table describes respiratory disease outbreaks:

Table I: Respiratory Disease Outbreaks, West Virginia, July- September, 2011 (N=4)

| Type of Outbreak | Number of outbreaks | Reporting Source | Laboratory Testing |
|---|---------------------|------------------|--|
| Legionellosis | 1 | Community | Lab confirmed |
| Lower Respiratory Illness (LRI) (Undetermined etiology) | 3 | LTCFs | Negative or non-contributory lab results |

Rash Illness Outbreaks

Two rash illness outbreaks were reported from 2 counties. None of the rash illness outbreaks were confirmed by laboratory testing.

The following table describes rash illness outbreaks:

Table IV: Rash Illness Outbreaks, West Virginia, July - September, 2011 (N=2)

| Type of Outbreak | Number of Outbreaks | Reporting Source | Laboratory Testing |
|------------------|---------------------|------------------|--|
| Scabies | 1 | School | No testing done/ clinical diagnosis |
| Varicella | 1 | School | No testing done/ clinical diagnosis |

Other Outbreaks

Six confirmed outbreaks characterized as “other” were reported from 5 counties. Of the six outbreaks described as other, 4 outbreaks were caused by multi-drug resistant organisms (MDROs), one was an outbreak of febrile headache of unknown etiology and one was an outbreak of conjunctivitis.

The following table describes outbreaks categorized as other:

Table V: Outbreaks characterized as “other”, West Virginia, July - September, 2011 (N=6)

| Type of Outbreak | Number of Outbreaks | Reporting Source | Laboratory Testing |
|---|---------------------|------------------|--|
| Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) | 1 | Sports team | Lab confirmed |
| Carbapenem-Resistant <i>Enterobacteriaceae</i> (CRE) | 1 | Day care | |
| Carbapenem-Resistant <i>Klebsiella pneumonia</i> (CRKP) | 1 | LTCF | Lab confirmed |
| Conjunctivitis | 1 | LTCF | Lab confirmed |
| Febrile headache | 1 | LTCF | No testing done/ clinical diagnosis |
| | | Sport team | Negative or non- contributory lab results |

Healthcare-Associated Outbreaks (HAOs)

Eight of the 21 confirmed outbreaks were reported from healthcare facilities and were classified as health-care associated outbreaks (HAOs). Of the 8 HAOs, 7 (87.5%) outbreaks were reported from LTCFs and 1 (12.5%) from a hospital.

The following table summarizes the types of HAOs:

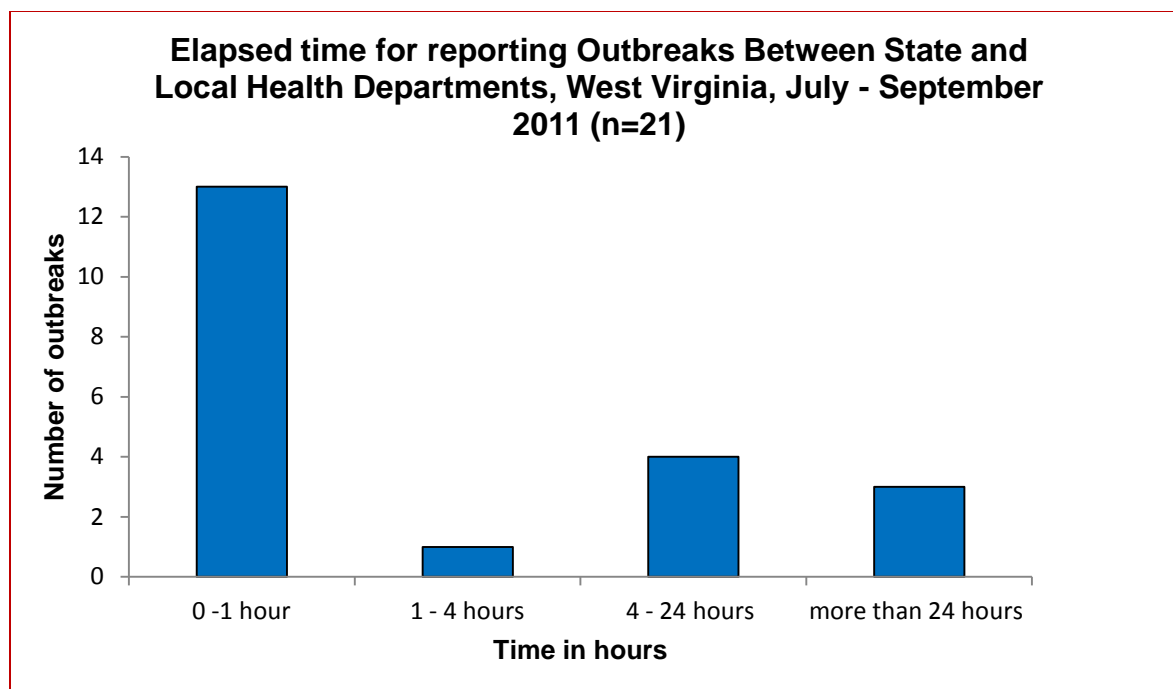
Healthcare-Associated Outbreaks, West Virginia, April- June, 2011

| Type of Outbreak | Number of outbreaks | Percent |
|------------------|---------------------|---------|
| Enteric | 2 | 25% |
| Respiratory | 3 | 37.5% |
| MDROs | 2 | 25% |
| Other | 1 | 12.5% |
| Total | 8 | 100% |

Reporting Time

In West Virginia, outbreaks should be reported immediately to the local health departments (LHDs). According to infectious disease rules and regulations, LHDs should report outbreaks within 60 minutes to the Bureau for Public Health (BPH). There has been marked improvement in outbreak recognition and reporting during this reporting period. Of 21 confirmed outbreaks, 13 (62%) were reported to BPH within one hour. Data on reporting time was complete in 100% of outbreaks in this quarter.

The following graph illustrates the time elapsed for reporting outbreaks between the state and local health departments:



Outbreak toolkits to assist in investigating the most commonly encountered outbreaks can be found at: <http://www.dhhr.wv.gov/oeps/disease/ob/Pages/OutbreakToolkits.aspx>